New CLSI/NCCLS Antimicrobial Susceptibility Testing (AST) Recommendations
M100-S15 Checklist

NA, not applicable

Will Implement	Previously Implemented	NA	Action
General			
			Review current **product insert** from commercial antimicrobial susceptibility testing products used in my laboratory and ensure all recommendations for testing/reporting are followed. The procedures in the manufacturer's product insert takes precedent over those found in CLSI/NCCLS standards.
			Obtain **written documentation** from medical staff for testing/reporting of organisms/antimicrobial agents beyond those suggested in CLSI/NCCLS standards.
			Add **temperature ranges** to AST procedures, if appropriate: 33-35°C for staphylococci; 33-37°C for other organism/antimicrobial combinations.
			Review indications for use of **daptomycin** and develop protocol for testing/reporting with medical staff, if appropriate.
			Review indications for use of **telithromycin** and develop protocol for testing/reporting with medical staff, if appropriate.
			Review indications for using recommended ATCC strains for **quality assessment (QA).** Strains currently suggested for QA include: *S. aureus* ATCC BAA-976 (D zone test) *S. aureus* ATCC BAA-977 (D zone test) *Klebsiella pneumoniae* ATCC 700603 (sometimes recommended for QC also)
Gram Negatives			
			Perform **ESBL testing on *Proteus mirabilis*** when isolated from significant sources. Note that cefpodoxime, ceftazidime, and cefotaxime are appropriate drugs to screen for ESBL production in *P. mirabilis* and screening breakpoints for cefpodoxime differ from those for *E. coli* and *Klebsiella* spp. Phenotypic confirmatory testing and reporting for *P. mirabilis* is identical to that for *E. coli* and *Klebsiella* spp.
			For **ESBL screen test QC**, test *K. pneumoniae* ATCC 700603 OR *E. coli* ATCC 25922 daily or weekly. Use *K. pneumoniae* ATCC 700603 for **QA.**
			For **ESBL phenotypic confirmatory test QC**, test *K. pneumoniae* ATCC 700603 AND *E. coli* ATCC 25922 daily or weekly.
			Review agents tested/reported on ***Pseudomonas aeruginosa, Acinetobacter* spp., *Burkholderia cepacia,* and *Stenotrophomonas maltophilia*** and consider modifying procedures based on new recommendations in M100-S15.
			Identify a strategy for testing supplemental agents when an isolate is encountered that is resistant to all drugs on routine test panel. This may include MIC testing of **polymyxin B** for highly resistant non-Enterobacteriaceae. Reference laboratory assistance may be appropriate.
			Identify a strategy for AST of ***Neisseria meningitidis*,** when requested. Include a safety protocol for handling this species. Reference laboratory assistance may be appropriate.
Gram Positives			
			Review potential utility of the **cefoxitin disk diffusion test** for *mec*A-mediated resistance in ***S. aureus***. Cefoxitin disk diffusion

			test is comparable to OX MIC, OX disk diffusion, PBP2a and *mec*A for *S. aureus.*
			Review potential utility of the **cefoxitin disk diffusion test** for *mec*A-mediated resistance in **coagulase-negative staphylococci (CoNS).** Cefoxitin disk diffusion test is superior to OX MIC and OX disk diffusion for CoNS.
			Determine if **testing for *mec*A** would be appropriate when equivocal results for oxacillin are encountered in *S. aureus* or CoNS. This would pertain to isolates from critical sources following discussion with MD. Reference laboratory assistance may be appropriate.
			Apply *S. aureus* oxacillin MIC and zone diameter breakpoints to ***S. lugdunensis*.** Apply cefoxitin zone diameter breakpoints similarly, if appropriate**.**
			If using an AST that is unreliable in detecting VISA or VRSA, perform **BHI vancomycin screen on *S. aureus***.
			Add CDC's **"Algorithm for Testing *S. aureus* with Vancomycin"** to AST procedure for *S. aureus.*
			Obtain ***S. aureus* ATCC BAA-976 and *S. aureus* ATCC BAA-977** for QA of the D zone test for inducible clindamycin resistance.
			Apply new **gatifloxacin, levofloxacin and moxifloxacin** disk diffusion and MIC breakpoints for **staphylococci**.
			Discontinue any extrapolation of results among **gatifloxacin, levofloxacin and moxifloxacin for *Streptococcus pneumoniae.***
			Perform **D zone test** for inducible clindamycin resistance on **beta-hemolytic streptococci** prior to reporting a clindamycin-S result on an erythromycin-R and clindamycin-S isolate. Determine those circumstances when such testing is warranted.
			Implement MMWR 51 (RR-11), 2002 **Group B *Streptococcus* screening** procedure for pregnant women to include AST of isolates from women at high risk for penicillin anaphylaxis.
QA/QC			
			Modify **QC limits** for those organism/antimicrobial agent combinations listed in M100-S15 (boldface type) for which there has been a change in the QC range.
			Test **ATCC QC strains** daily or weekly even if no new testing reagents/materials have been put into use since last QC testing was performed.
			Follow manufacturer's QC procedures and use the **manufacturer's QC ranges** even if these differ from CLSI/NCCLS QC limits.
			When submitting ***Salmonella* spp.** to public health authorities, inform them if the isolate demonstrated intermediate or resistant results to a 3rd generation cephalosporin, intermediate or resistant results to a fluoroquinolone and/or resistance to nalidixic acid.
			Review **"Summary of Comments and Subcommittee Responses"** found on pages 84-86 (M2) and pages 160-162 (M7) in M100-S15.